

U.S. Patent Application No. 10/602,035
Amendment dated March 5, 2008
Reply to Office Action of December 11, 2007

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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-36. (Canceled)

37. (New) A method for reducing surgical adhesion formation between tissue surfaces in a vertebrate subject, comprising administering to the subject an effective amount of at least one inhibitor of a chymotrypsin-like serine protease to a site on a tissue surface for a period of time sufficient to reduce surgical adhesion formation.

38. (New) A method according to claim 37, wherein said inhibitor of a chymotrypsin-like serine protease is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said inhibitor of a chymotrypsin-like serine protease at said site, and wherein said delivery vehicle comprises microcapsules or microspheres.

39. (New) A method according to claim 38, wherein said microcapsules or microspheres comprise a biodegradable polymer selected from the group consisting of poly(α -hydroxy acids), polyhydroxybutyric acids, polycaprolactones, polyorthoesters, polyanhydrides, PACA, polycyanoacrylates, poly(D,L-lactide-co-glycolide) and mixtures thereof.

40. (New) A method according to claim 37, wherein said inhibitor of a chymotrypsin-like serine

U.S. Patent Application No. 10/602,035
Amendment dated March 5, 2008
Reply to Office Action of December 11, 2007

protease is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said inhibitor of a chymotrypsin-like serine protease at said site, and wherein said delivery vehicle comprises a film.

41. (New) A method according to claim 40, wherein said film comprise a biodegradable polymer selected from the group consisting of poly(α -hydroxy acids), polyhydroxybutyric acids, polycaprolactones, polyorthoesters, polyanhydrides, PACA, polycyanoacrylates, poly(D,L-lactide-co-glycolide) and mixtures thereof.

42. (New) A method according to claim 37, wherein said inhibitor of a chymotrypsin-like serine protease is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said inhibitor of a chymotrypsin-like serine protease at said site, and wherein said delivery vehicle comprises liposomes.

43. (New) A method according to claim 37, wherein said inhibitor of a chymotrypsin-like serine protease is administered in conjunction with a delivery vehicle which maintains an effective local concentration of said inhibitor of a chymotrypsin-like serine protease at said site, and wherein said delivery vehicle comprises a high-molecular weight carrier selected from the group consisting of hyaluronic acid, hydrogels, carboxymethylcellulose, dextrans, cyclodextrans, and mixtures thereof.

44. (New) A method according to claim 37, wherein said vertebrate subject is a human.

U.S. Patent Application No. 10/602,035
Amendment dated March 5, 2008
Reply to Office Action of December 11, 2007

45. (New) A method according to claim 37, wherein said inhibitor of a chymotrypsin-like serine protease is an inhibitor of a chymase.

46. (New) A method according to claim 45, wherein said inhibitor of a chymase is a peptidyl derivative of aryl diesters of α -aminoalkylphosphonic acids.

47. (New) A method according to claim 45, wherein said inhibitor of a chymase is Suc-Val-Pro-Phe^P(OPh)₂.

48. (New) A method according to claim 45, wherein said inhibitor of a chymase is an enantiomerically enriched preparation of Suc-Val-Pro-Phe^P(OPh)₂.

49. (New) A method according to claim 48, wherein Suc-Val-Pro-Phe^P(OPh)₂-A comprises greater than 50% by weight of the total Suc-Val-Pro-Phe^P(OPh)₂ in said enantiomerically enriched preparation.

50. (New) A method according to claim 48, wherein Suc-Val-Pro-Phe^P(OPh)₂-A comprises greater than 80% by weight of the total Suc-Val-Pro-Phe^P(OPh)₂ in said enantiomerically enriched preparation.

51. (New) A method according to claim 48, wherein Suc-Val-Pro-Phe^P(OPh)₂-A comprises greater than 95% by weight of the total Suc-Val-Pro-Phe^P(OPh)₂ in said enantiomerically enriched preparation.

U.S. Patent Application No. 10/602,035
Amendment dated March 5, 2008
Reply to Office Action of December 11, 2007

52. (New) A method according to claim 37, wherein said inhibitor of a chymotrypsin-like serine protease is administered to said subject before, during or after a surgical procedure.

53. (New) A method according to claim 52, wherein said surgical procedure is an abdominal surgical procedure.

54. (New) A method according to claim 52, wherein said surgical procedure is a thoracic surgical procedure.

55. (New) A method according to claim 52, wherein said surgical procedure is an ophthalmic surgical procedure.

56. (New) A method according to claim 52, wherein said surgical procedure is a cardiac or gynecologic surgical procedure.

57. (New) A method for reducing postoperative adhesion formation in the peritoneum of a warm-blooded mammal, comprising administering to said mammal an effective amount of at least one inhibitor of a chymotrypsin-like serine protease to a site on an organ surface for a period of time sufficient to reduce adhesion formation.

58. (New) A method according to claim 57, wherein said inhibitor of a chymotrypsin-like serine protease is an inhibitor of a chymase.

U.S. Patent Application No. 10/602,035
Amendment dated March 5, 2008
Reply to Office Action of December 11, 2007

59. (New) A method according to claim 58, wherein said inhibitor of a chymase is a peptidyl derivative of aryl diesters of α -aminoalkylphosphonic acids.

60. (New) A method according to claim 58, wherein said inhibitor of a chymase is Suc-Val-Pro-Phe^P(OPh)₂.

61. (New) A method according to claim 58, wherein said inhibitor of a chymase is an enantiomerically enriched preparation of Suc-Val-Pro-Phe^P(OPh)₂.

62. (New) A method according to claim 61, wherein Suc-Val-Pro-Phe^P(OPh)₂-A comprises greater than 50% by weight of the total Suc-Val-Pro-Phe^P(OPh)₂ in said enantiomerically enriched preparation.

63. (New) A method according to claim 61, wherein Suc-Val-Pro-Phe^P(OPh)₂-A comprises greater than 80% by weight of the total Suc-Val-Pro-Phe^P(OPh)₂ in said enantiomerically enriched preparation.

64. (New) A method according to claim 61, wherein Suc-Val-Pro-Phe^P(OPh)₂-A comprises greater than 95% by weight of the total Suc-Val-Pro-Phe^P(OPh)₂ in said enantiomerically enriched preparation.

65. (New) A method according to claim 57, wherein said warm-blood mammal is a human.